

CLAIMS

What is claimed is:

1 1. A method for automatically deploying a quality of service ("QoS") policy to a

2 plurality of devices in a packet telephony network based on a QoS policy template comprising

3 the computer-implemented steps of:

4 receiving device information that defines authentication and connectivity information of a
5 network device;

6 receiving interface information defining one or more interfaces associated with the
7 device;

8 based on the device information and interface information, determining one or more
9 policy templates that associate the quality of service tools with the device traffic flows for
10 deployment to a plurality of network devices simultaneously;

11 creating and storing one or more quality of service policy templates in a database that
12 may be used to implement quality of service settings in a network device.

1 2. A method according to claim 1 wherein said step of receiving interface

2 information comprises executing an SNMP, telnet, or virtual device query of said device.

1 3. A method according to claim 1 wherein said step of determining policies

2 comprises creating and storing a policy filter.

1 4. A method according to claim 1 wherein said step of determining policies

2 comprises defining said policy's action.

1 5. A method for defining quality of service (“QoS”) policy templates for packet
2 telephony networks comprising storing said policy templates in a centralized, network-wide
3 policy database or another storage device.

1 6. A method of deploying a quality of service (QoS) template in a packet telephony
2 network comprising the computer implemented steps of:
3 generating a first list of command line interface (“CLI”) commands that correspond to
4 properties for each device,
5 sending said block of CLI commands to each device to be implemented.

1 7. A computer-readable medium carrying one or more sequences of instructions for
2 automatically deploying a quality of service (“QoS”) policy to a plurality of devices in a packet
3 telephony network based on a QoS policy template, which instructions, when executed by one or
4 more processors, cause the one or more processors to carry out the steps of:

5 receiving device information that defines the authentication and connectivity information
6 of network device;
7 receiving said device’s interface information;
8 based on the device information and interface information, determining one or more
9 policy templates that associate the quality of service tools with the device traffic flows for
10 deployment to several network devices simultaneously;
11 creating and storing one or more quality of service policy templates in a database that
12 may be used to implement quality of service settings in a network device.

1 8. The computer-readable claim according to Claim 7 wherein said step of receiving
2 interface information comprises executing an SNMP and telnet query of said device.

1 9. The computer-readable claim according to Claim 7 wherein said step of
2 determining policies comprises creating and storing a policy filter.

1 10. The computer-readable claim according to Claim 7 wherein said step of
2 determining policies comprises defining said policy's action.

1 11. A computer-readable medium carrying one or more sequences of instructions for
2 defining quality of service ("QoS") policy templates in a packet telephony network, which
3 instructions, when executed by one or more processors, cause the one or more processors to
4 store said policy templates in a centralized, network-wide policy database or another storage
5 device.

1 12. A computer-readable medium carrying one or more sequences of instructions for
2 deploying quality of service ("QoS") policy templates in a packet telephony network, which
3 instructions, when executed by one or more processors, cause the one or more processors to
4 carry out the steps of: generating a first list of command line interface ("CLI") commands that
5 correspond to properties for each device,

6 sending said block of CLI commands to each device to be implemented.

1 13. An apparatus for automatically deploying a quality of service ("QoS") policy to a
2 plurality of devices in a packet telephony network based on a QoS policy template, comprising:

3 means for receiving device information that defines authentication and connectivity
4 information of a network device;

5 means for receiving interface information defining one or more interfaces associated with
6 the device;

7 based on the device information and interface information, means for determining one or
8 more policy templates that associate the quality of service tools with the device traffic flows for
9 deployment to several network devices simultaneously;

10 means for creating and storing one or more quality of service policy templates in a
11 database that may be used to implement quality of service settings in a network device.

1 14. An apparatus for automatically deploying a quality of service (“QoS”) policy to a
2 plurality of devices in a packet telephony network based on a QoS policy template, comprising:
3 a network interface coupled to a network for receiving command-line interface information
4 therefrom;

5 one or more processors communicatively coupled to the network interface and configured to
6 receive information therefrom;

7 one or more stored sequences for automatically deploying a quality of service (“QoS”) policy to
8 a plurality of devices in a packet telephony network based on a QoS policy template and
9 which, when executed by the one or more processors, cause the one or more processors to
10 carry out the steps of:

11 receiving device information that defines authentication and connectivity information of a
12 network device;

13 receiving interface information defining one or more interfaces associated with the
14 device;

15 based on the device information and interface information, determining one or more
16 policy templates that associate the quality of service tools with the device traffic flows for
17 deployment to several network devices simultaneously;

18 creating and storing one or more quality of service policy templates in a database that
19 may be used to implement quality of service settings in a network device.

Quality of Service Policy Template